## IN THE CLAIMS:

(currently amended) A system for implementing a backoff protocol, comprising:
a client subsystem configured to generate that generates a request for access to a shared resource; and

a server subsystem configured to receive that receives said request, return returns a LOCKED indicator upon an expectation that said shared resource is unavailable and otherwise return returns a FREE indicator, said client subsystem further configured to respond responding to said LOCKED indicator by waiting an amount of time before regenerating said request for said access.

- 2. (currently amended) The system as recited in Claim 1 wherein said server subsystem has said expectation when said server subsystem returned said FREE indicator less more than  $\Delta + 2\delta$  time units previously.
- 3. (original) The system as recited in Claim I wherein said server subsystem is replicated among a plurality of separate servers.
- 4. (original) The system as recited in Claim 1 wherein said system is coupled to a synchronous computer network.
- 5. (original) The system as recited in Claim 1 wherein a unique rank is associated with said request.
- 6. (currently amended) The system as recited in Claim 1 wherein said amount of time is proportional to twice a previous amount of time associated with said waiting shared resource is an Ethernet channel.
- 7. (currently amended) The system as recited in Claim 1 wherein said elient subsystem digitally signs-said request is independent of digital signatures.

8. (currently amended) A method of implementing a backoff protocol, comprising: generating a request to a server subsystem for access to a shared resource; determining if said shared resource has an expectation of being unavailable;

returning a LOCKED indicator <u>based</u> upon <u>said</u> an expectation <u>when</u> that said shared resource is unavailable[[;]] <u>and</u> otherwise returning a FREE indicator; and

responding to said LOCKED indicator by waiting before regenerating said request for said access.

- 9. (currently amended) The method as recited in Claim 8 wherein said server subsystem has said expectation when said server subsystem returned said FREE indicator less more than  $\Delta + 2\delta$  time units previously.
- 10. (original) The method as recited in Claim 8 wherein said method is carried out in a synchronous computer network.
- 11. (original) The method as recited in Claim 8 wherein a unique rank is associated with said request.
- 12. (original) The method as recited in Claim 8 wherein said shared resource is an Ethernet channel.
- 13. (currently amended) The method as recited in Claim 8 wherein further comprising digitally signing said request is independent of digital signatures.
  - 14. (currently amended) A computer network, comprising:
  - a plurality of clients;
  - a plurality of servers coupled to said plurality of clients;
  - at least one shared resource coupled to said plurality of servers;

a system for implementing a backoff protocol with respect to said at least one shared resource, including:

a client configured to generate that generates a request for access to a shared resource, and

a server configured to receive that receives said request, return returns a LOCKED indicator upon an expectation that said shared resource is unavailable and otherwise return returns a FREE indicator, said client further configured to respond responding to said LOCKED indicator by waiting before regenerating said request for said access.

- 15. (currently amended) The computer network as recited in Claim 14 wherein said server subsystem has said expectation when said server subsystem returned said FREE indicator less more than  $\Delta + 2\delta$  time units previously.
- 16. (original) The computer network as recited in Claim 14 wherein said computer network is synchronous.
- 17. (original) The computer network as recited in Claim 14 wherein a unique rank is associated with said request.
- 18. (original) The computer network as recited in Claim 14 wherein said one of said at least one shared resource is an Ethernet channel.
- 19. (currently amended) The computer network as recited in Claim 14 wherein said elient subsystem digitally signs said request is independent of digital signatures.
- 20. (new) The system as recited in Claim 1 having an amortized system response time independent of a maximum number of possible requests for access to said shared resource.